IN THE SPECIFICATION:

Please amend the Specification as follows.

1) Please amend the second full paragraph on page 3, lines 3 to 7, as follows:

Therefore it is evident that there exist a variety of techniques for determining the position of the mobile station ~~with~~ within a cell. In many of these systems, for example TDOA, the position measurement signals are received by LMUs (Location Measuring Units) from the MS and then sent to a SMLC (Serving Mobile Location Centre) that calculates the location of the MS.

2) Please amend the first full paragraph on page 4, lines 1-3, as follows:

However, this solution is not optimised in situations in which there are two or more PSAP service areas that over lap with the coverage of a single cell, and the problem becomes even more acute when the ~~cell's~~ cells are setup to have large coverage areas.

3) Please amend the first full paragraph on page 5, lines 1-3, as follows:

Preferably said selecting is done using the control point for ~~translates~~ translating the first position estimate which is a geographical position into a routing number of the selected answering point.

4) Please amend the second full paragraph on page 7, lines 4-11, as follows:

An MS 2 is shown connected to a BTS 4 having a particular cell coverage dependant on the transmission power of the BTS 4. The BTS 4 may include a LMU Type B, as depicted. Also as depicted, the BTS 4 may be in communication with a LMU type A. The BTS 4 can have the LMU functionality in the BTS itself or separate. The BTS 4 is connected to a BSC 6 (Base Station Controller), which typically controls a plurality of BTSs each having their own cell coverage. The BSC 6 can be connected to an SMLC 16 (Serving Mobile Location Centre) or to an MSC 8. As depicted, the BSC 6 may be in communication with a LMU Type B. The MSC 8 typically controls a plurality of BSCs and has a VLR (Visitor Location Register), which maintains a database of the details of the MS when entering into a visited network.

5) Please amend the fourth full paragraph bridging pages 7 and 8, as follows:

The MSC 8 is also connected to a GMLC 10. Using information that it stores or has access to the Gateway Mobile Location Centre (GMLC) authenticates the LCS client 18 that is requesting the position of a subscriber of the system. The GMLC 10 can identify the subscriber by an identifier that specifies the subscriber or the hardware he is using to access the system (e.g. Mobile Subscriber Integrated Services Digital Network Number (MSISDN) or IMSI codes). Using such an identifier it can query the HLR 14 (Home Location Register) to determine in which MSCs (or equivalent's) coverage area the subscriber is located. Such a query will yield the address of the MSC or the address of an equivalent device such as an Serving General Packet Radio Service Support Node

(SGSN). The HLR is aware of the current (for instance) MSC and VLR from previous location update procedures. When a location request is received by the MSC the MSC will check for any subscriber-specific LCS privacy restrictions that might be in place, and if the request is not barred by such restrictions it proceeds with the positioning request towards the radio network or SMLC.

6) Please amend the third full paragraph on page 8, lines 12-16, as follows:

The MSC 8 sends the location request to the relevant BSC 6. In a preferred embodiment, the functionality of the SMLC 16 resides with the BSC, and therefore the geographical position of MS 2 can be computed within the radio network using any of the known positioning methods, for example TDOA. Once the geographical location has been calculated it is ~~return~~ returned via the MSC 8 to the GLMC 10. One skilled in the relevant art will appreciate that the interfaces and/or connections presented by Figure 1 and the descriptions presented herein, may be described in accordance with Um, Abis, Gb, A, Lb, CBC-BSC, CBC-SMLC, Gs, Ls, Lg, Lp, Lh, Lc, and Le.

7) Please amend the fourth full paragraph on page 8, lines 17-28, as follows:

Figure 2 shows a system level of the LCS arrangement for GSM and UMTS radio access networks as specified in the 3GPP TS 23.271 Release 4 specification for the UMTS (Universal Mobile Telecommunications system) Functional Descriptions of Location Services. This diagram shows that the standard has evolved to take into account

3G (Third Generation) UMTS networks, which communicate over a UTRAN 22 (UMTS Radio Access Network) with the core network, as well as reinforcing the fact that legacy 2G (second Generation) GSM networks communicate over the GERAN (GSM/EDGE Radio Access Network). Figure 2 also shows a MSC 8 which may include a 2G MSC, and a MSC 8' which may be described as an MSC server. Figure 2 further illustrates a Central Broadcast Center (CBC) in accordance with the art. Therefore, depending on the radio network, the functionality of the SMLC as referred to in relation to Figure 1 can reside in either the GERAN 20 or the UTRAN 22. Most of the core functionality is the same, wherein the same reference numerals refer to the same functionality as described in figure 1, for example, the GMLC 10, the external LCS client 18, the gsmSCF, etc. One skilled in the art will appreciate that the interfaces and/or connections presented by Figure 2 and the descriptions presented herein, may be described in terms Um, Uu, A, Gb, Iu-ps, Iu, Lg, Lh, Lc, Le, OSA-LCS, and OSA-LCS

8) Please amend the first full paragraph on page 9, lines 1-8, as follows:

In an embodiment of the present invention, the service which is requesting the positioning information is an emergency service. Figure 3 shows an example of a network reference model for supporting emergency services as specified in the TIA/EIA/J-STD-036-A document. The BSS (Base Station subsystem) 30 should be understood to refer to the radio network comprising the BSCs 6 and BTSs 4. The MS can be connected to a visited Public Land Mobile Network (PLMN) network controlled by a

visited MSC 8, which in turn is connected to a GMLC 10 and through an emergency services network 32 to a PSAP point 28. The MSC 8 may be described as a visited MSC and the MSC 8" may be described as a serving MSC.

9) Please amend the first full paragraph on page 10, lines 1-15, as follows:

The Base Station Subsystem (BSS) 30 receives the emergency call from the MS and notifies the Visiting Mobile Switching Center (VMSC) 8. To achieve this, the MS first establishes a radio interface connection with the BSC. Then the MS sends a connection management service request to the BSC, which forwards that to the MSC. At this point an A-interface connection is created between the BSC and the MSC. After that the MS sends a call setup request to the MSC, which is relayed transparently through the BSC. The BSS is also involved in the handling of certain positioning procedures. As a generic handling procedure, the BSS is equipped to collect/determine timing advance (TA) information for communications between the MS and it and neighbouring cells, together with receive signal strength levels for such communications. The BSS may determine the location of the MS based on this location. Alternatively, the BSS may transmit TA information for it and neighbour cells, or just for its cell to another entity that can then determine the location. For example, the TA information could be sent to the SMLC to assist in obtaining a position estimate. Specific BSS functionality in positioning procedures is specified in 3GPP TS 03.71 or 3GPP TS 43.059.

10) Please amend the first full paragraph on page 11, lines 5-7, as follows:

The GMLC 10 also handles requests for the MS from the ESME such as the updated (current) or last known position. The GMLC stores the initial position estimate to support NCAS signalling. One Skilled in the art will appreciate that the interfaces and/or connections presented by Figure 3 and the descriptions presented herein, may be described in terms of Um, Lb, A, E, Ls, A_{js} D_j, Lg, and E_2.

11) Please amend the second full paragraph on page 11, lines 8-11, as follows:

Figure 4 shows an example of PSAP coverage having ~~difference~~ different ESZs (Emergency Service Zones). Two BTS elements 4 and 4' are indicated, each having their own radio cell coverage 40 and 40' respectively. Also, two arcs ~~26~~ 36 and 28 represent the coverage zone of a first PSAP 42 and a second PSAP 44 respectively.

12) Please amend the first full paragraph on page 12, lines 3-22, as follows:

The messages referred to with the numerals (a) through (l) refer to the different messages and will now be described. At step (a) the MS invokes an emergency services call. This triggers determination of the initial position of the MS by the sending of a Perform Location message to the SMLC in step (c). At step (b) the "Call Setup" message extends the call to the ESNE for processing the call by the emergency service. At step (c) a "perform location [QoS]" message is sent from the MSC to the SMLC, requesting the computation of the initial position within a particular accuracy range given by the QoS

(Quality of Supply) requirement. If the SMLC resides in the BSS then the MSC would send this message to the BSC, which would send it further to the SMLC. At step (d) messages for specific positioning methods in the radio network are exchanged, for example TDOA, after which time the initial position is estimated and returned by the SMLC to the MSC at step (e). At step (f) the initial position is sent from the MSC to the GMLC and acknowledged at step (g). At step (h), the ESME requests the initial position of the MS stored in the GLMC and this is supplied to the ESME at step (i). At step (j), the emergency call is released, which frees up a significant amount of dynamic information that is typically setup for each emergency call. This frees the valuable resources of the emergency services network associated with a particular PSAP to deal with other calls. At steps (k) and (l) any information relating to the call including the initial position is released from the storage of the GMLC.

13) Please amend the second full paragraph on page 12, lines 23-30, as follows:

One disadvantage of this method is that the call must be extended to the ESNE before the geographical location is known to any better accuracy than the simply which cell the MS is in. If initial position were to be used for routing purposes then the Call Setup message (step (b)) should be delayed until the MSC ~~had got~~has received a response to the positioning request (step (e)). The positioning methods used in determining an initial position need to be very accurate in order to satisfy the strict FCC requirements.

However, another requirement is that the emergency call should be routed to the relevant PSAP as soon as possible.

14) Please amend the last full paragraph on page 15, lines 20-25, as follows:

(b). If the emergency call should be routed based on geographical position, then the MSC initiates determination of interim position using signal flow presented in figure 7. The requested QoS is the accuracy requirement for the interim location that is used for routing the emergency call. In order to ~~fulfil~~fulfill time constraints for determining interim position the SMLC may use for example CI + TA positioning method or similar.

15) Please amend the last paragraph bridging pages 16, lines 15-23, as follows:

(d). The gsmSCF may establish a monitoring relationship by arming one or more detection points. This may be needed in order to receive notification at release of the emergency call. Thus, the gsmSCF 12 can request that when certain events are encountered during call processing of the SSF in the MSC 8, that these events are notified to the gsmSCF. For example, the "CAP Request Report BCSM event" can arm a detection point in the BCSM (Basic Call State Model) of the SSF in MSC 8 to notify the gsmSCF when the call is released (see step ~~q~~ l below). In this way, when notification of emergence call release is received, valuable resources of the SCP (e.g. a unique ESRK value reserved for the call) can be freed.

16) Please amend the last paragraph bridging pages 16 and 17 as follows:

(e). The gsmSCF requests the MSC to continue call processing with modified information. That is, the geographical position containing the interim position can be translated from a latitude/longitude co-ordinate to a new destination address, to determine which PSAP to route the emergency call to. In one embodiment of the present invention, the translation can be performed by a CRDB (Coordinate Routing Database). In this way the gsmSCF can supply a new routing destination for the call, wherein the "CAP Connect" message can identify the relevant PSAP with new destination routing address, which is for example an ESRK (Emergency Services Routing Key) allocated to ~~particular~~ the emergency call as shown, or alternatively ESRD (Emergency Services Routing Digits) that identifies ~~also identifies~~ a base station, cell site or sector.

17) Please amend the second full paragraph on page 17, lines 11-17, as follows:

(g). The MSC sends a request to perform initial location determination using a requested QoS_2. QoS_2 is in line with the FCC regulations and therefore is more accurate than QoS_1. The requested QoS_2 is the accuracy requirement for the initial position that is reported to the GMLC to determine more accurately the position of the MS. Messages for initial positioning methods are transferred as for the known methods as described in

3GPP TS 43.059, for example E-OTD. Therefore the initial position method of steps (h-o) proceeds as before (see Figure 7).

18) Please amend the second full paragraph on page 18, lines 10-16, as follows:

It needs to be appreciated that the described embodiments are particularly useful in that they have minimal impact on existing network entities. The described embodiments use standardised interfaces and routing is based on an interim position performed using the control functionality afforded by the gsmSCF, which is an existing entity in 3GPP network architecture. That is, the CAMEL framework provides a standardised interface and protocol for ~~establish~~ establishing control relationships between the MSC/SSF and the gsmSCF.